

124600

Revision: 23.02.2011
Printing date: 14.06.2014

01 Identification of the substance/mixture and of the company/undertaking

- Product identifier
- Trade name:
Melittin
- Article number:
new: 4030808 old: H-4310
- CAS Number:
20449-79-0
- Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the preparation
Laboratory chemicals
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
Bachem AG
Hauptstrasse 144
CH-4416 Bubendorf
Switzerland
E-mail msds@bachem.com
Tel +41 61 935 2323
Fax +41 61 935 2325
- Further information obtainable from:
Department: Marketing
- Emergency telephone number:
+41 44 251 51 51 (Swiss Toxicological Information Centre, CH-Zurich)

02 Hazards identification

- Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS06

Acute Tox. 3 - H301 Toxic if swallowed.
Acute Tox. 3 - H311 Toxic in contact with skin.
Acute Tox. 3 - H331 Toxic if inhaled.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC



T Toxic

R 23/24/25

Toxic by inhalation, in contact with skin and if swallowed.

- Information concerning particular hazards for human and environment:
Not applicable.
- Label elements
- Labelling according to Regulation (EC) No 1272/2008



GHS06

- Signal word
Danger
- Hazard statements

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- H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H331 Toxic if inhaled.
- Precautionary statements
 - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 - P264 Wash thoroughly after handling.
 - P270 Do not eat, drink or smoke when using this product.
 - P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
 - P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 - P501a Dispose of contents/container in accordance with local/regional/ national/international regulations.
 - Other hazards
 - Results of PBT and vPvB assessment
 - PBT:
 - Not applicable.
 - vPvB:
 - Not applicable.

03 Composition/information on ingredients

- Chemical characterization: Substances

<i>CAS No.</i>	<i>Description</i>
20449-79-0	Melittin

- Identification number(s)

• EINECS Number:

-

• RTECS Number:

OS3965000

04 First aid measures

- Description of first aid measures
- General information:
 - Involve doctor immediately.
 - Immediately remove any clothing soiled by the product.
 - Remove breathing equipment only after contaminated clothing have been completely removed.
 - In case of irregular breathing or respiratory arrest provide artificial respiration.
- After inhalation:
 - Supply fresh air or oxygen; call for doctor.
 - In case of unconsciousness place patient stably in side position for transportation.
 - Call a doctor immediately.
- After skin contact:
 - Immediately wash with water and soap and rinse thoroughly.
 - Seek immediate medical advice.
- After eye contact:
 - Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:
 - Do not induce vomiting; call for medical help immediately.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed
 - No further relevant information available.
- Indication of any immediate medical attention and special treatment needed
 - No further relevant information available.

05 Firefighting measures

- Extinguishing media
- Suitable extinguishing agents:
 - CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture
 - No further relevant information available.
- Advice for firefighters

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- Protective equipment:
Mouth respiratory protective device.

06 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
Avoid formation of dust.
Use respiratory protective device against the effects of fumes/dust/ aerosol.
Wear protective clothing.
- Environmental precautions:
Suppress gases/fumes/haze with water spray.
- Methods and material for containment and cleaning up:
Dispose contaminated material as waste according to item 13.

07 Handling and storage

- Handling:
- Precautions for safe handling
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of dust.
- Information about fire - and explosion protection:
Keep respiratory protective device available.
- Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles:
No special requirements.
- Information about storage in one common storage facility:
Store away from foodstuffs.
- Further information about storage conditions:
Keep container tightly sealed.
Store in dry conditions.
- Recommended storage temperature:
-20 +/- 5 °C
- Specific end use(s)
No further relevant information available.

08 Exposure controls/personal protection

- Control parameters
- Ingredients with limit values that require monitoring at the workplace:
Not required.
- Additional information:
The lists valid during the making were used as basis.
- Exposure controls
- Personal protective equipment:
- General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Store protective clothing separately.
Avoid contact with the eyes and skin.
- Respiratory protection:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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- Protective gloves
- Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection:
Safety glasses

09 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:	Powder
Colour:	White
Odour:	Nearly odourless
Odour threshold:	Not determined.
Molecular Weight	2.846,5000 g/mol

Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

Flash point: Not applicable.

Flammability (solid, gaseous): Not applicable.

Ignition temperature:

Decomposition temperature: Not determined.

Self-igniting: Not determined.

Danger of explosion: Not determined.

Explosion limits:

Lower: Not determined.

Upper: Not determined.

Vapour pressure: Not determined.

Density: Not determined.

Solubility in / Miscibility with

water: Not determined.

Viscosity:

Dynamic: Not determined.

Kinematic: Not determined.

Other information No further relevant information available.

10 Stability and reactivity

- Reactivity
- Chemical stability
- Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
- Possibility of hazardous reactions
No dangerous reactions known.
- Conditions to avoid
No further relevant information available.
- Incompatible materials:
No further relevant information available.
- Dangerous decomposition products:
No dangerous decomposition products known.

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11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
No further relevant information available.
- Primary irritant effect:
- on the skin:
No further relevant information available.
- on the eye:
No further relevant information available.
- Sensitization:
No sensitizing effects known.

12 Ecological information

- Toxicity
- Aquatic toxicity:
No further relevant information available.
- Persistence and degradability
No further relevant information available.
- Behaviour in environmental systems:
- Bioaccumulative potential
No further relevant information available.
- Mobility in soil
No further relevant information available.
- Additional ecological information:
- General notes:
Not known to be hazardous to water.
- Results of PBT and vPvB assessment
- PBT:
Not applicable.
- vPvB:
Not applicable.
- Other adverse effects
No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- Waste disposal key:
18 02 05
- Uncleaned packaging:
- Recommendation:
Disposal must be made according to official regulations.

14 Transport information

- Land transport ADR/RID (cross-border)
- ADR/RID class:** 6.1 (T2)
- Danger code (Kemler):** 60
- UN-Number:** 2811
- Packaging group:** III
- Hazard label:**



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Safety data sheet according to 1907/2006/EC, Article 31

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UN proper shipping name: 2811 TOXIC SOLID, ORGANIC, N.O.S. (Melittin)
Excepted quantities (EQ): E1
Limited quantities (LQ): LQ9
Transport category: 2
Tunnel restriction code: E

• Maritime transport IMDG:
IMDG Class: 6.1
UN Number: 2811
Label



Packaging group: III
EMS Number: F-A,S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Melittin)

• Air transport ICAO-TI and IATA-DGR:
ICAO/IATA Class: 6.1
UNID Number: 2811
Label



Packaging group: III
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Melittin)

- UN "Model Regulation":
UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (MELITTIN), 6.1, III
- Environmental hazards:
Not applicable.
- Special precautions for user
Warning: Toxic substances.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

15 Regulatory information

- Chemical safety assessment:
A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing MSDS:
Department: Marketing
- Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods

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according to 1907/2006/EC, Article 31

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IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)

- * Data compared to the previous version altered.